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Firm Name Ware, Fressola, Van Der Sluys & Adolphson, LLP								
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Date	February 6, 2007			Reg. No.	58,051			
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Francis J. Maguire, Jr.

Serial No: 09/524,491

Examiner: Leonid SHAPIRO

Filed: March 13, 2000

Group Art Unit: 2629

For: MOVEABLE HEADREST FOR VIEWING IMAGES FROM DIFFERENT DIRECTIONS

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AMENDED APPEAL BRIEF

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Kathleen Sipos

Dated: Debruary 6, 2007

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AMENDED APPEAL BRIEF

Sir:

This Amended Appeal Brief is in reply to the Notification of Non-Compliant Appeal Brief of January 9, 2007. The originally submitted Appeal Brief was in furtherance of the Notice of Appeal mailed under Rule 8 on August 23, 2006 and received by the Office on August 28, 2006. This is an appeal from the final Office Action mailed May 23, 2006 rejecting claims 1-19.

I. REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

The real party in interest in this appeal is Francis J. Maguire, Jr., a citizen of the United States of America.

II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

There are no related appeals or interferences.

III. STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-19 are pending in the application, and all claims are rejected. Applicant appeals the rejection of claims 1-19.

IV. STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

Applicants submitted an Amendment on March 9, 2006 in response to a non-final Office Action. Applicant did not submit any amendments subsequent to the final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

Claim 1 is directed to an apparatus that includes a support for supporting a user in viewing images in a standing, seated or reclining posture. *See* specification page 5, lines 20-23; page 6, lines 10-25; Figures 2-4. The apparatus of claim 1 also includes a moveable headrest for moving with rotational movements with respect to the support, and supporting a head of the user in executing the rotational movements while viewing the images from a changing direction. *See* specification page 6, line 26—page 7, line 22.

Claim 8 is directed to an apparatus that includes a sensor coupled to a moveable headrest for supporting a user's head with respect to a support. See Figure 9. The sensor is responsive to head movements of the user with respect to the support, for providing a sensed signal having a magnitude indicative of differing directions-of-view corresponding to the head movements of the user. See specification page 10, line 27—page 11, line 19. The apparatus of claim 8 also includes a reality engine for providing an image signal indicative of a sequence of images from differing directions-of-view selected according to the sensed signal and corresponding thereto. See specification page 11, lines 1-5. The apparatus of claim 8 also includes a display for

providing the sequence of images for viewing by the user from different directions-of-view. See specification page 11, lines 5-11.

Claim 9 is directed to an apparatus that includes a reality engine, a display and an actuator. *See* specification page 11, line 20—page 12, line 10. The reality engine is responsive to a start command signal and is for providing an image signal indicative of a sequence of images from differing directions-of-view and for providing an actuator command signal corresponding thereto. The display is responsive to the image signal, and is for providing the sequence of images for viewing by the user from different directions-of-view. The actuator is responsive to the actuator command signal, and is for moving a headrest with respect to a support with the headrest supporting a user's head with movements with respect to the support corresponding to the differing directions-of-view. *See* Figure 11.

Claim 10 is directed to an apparatus that includes a headrest and a support for supporting a user viewing images in a reclining posture with a head of said user resting on said headrest. See Figure 2. The headrest is mounted on or with respect to the support, and the headrest comprises a movable headrest for supporting the head of the user in executing movements in changing direction of the head of the user while viewing images provided from a correspondingly changing direction of view. The head of the user and the headrest move together during the change of direction with respect to the support. See specification page 5, lines 20-23; page 6, lines 10-25.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by <u>Park</u> (U.S. Patent No. 5,695,406).

Claims 16-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over <u>Park</u> in view of <u>Helman</u>. (U.S. Patent No. 5,791,735).

VII. ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

Claim Rejections Under § 102

Claim 1

Claim 1 is rejected under 35 U.S.C. § 102(b) as anticipated by <u>Park</u>. Claim 1 is not anticipated by <u>Park</u> because <u>Park</u> fails to disclose or suggest all of the limitations recited in claim 1. In order for a claim to be anticipated by a reference, each and every element as set forth in the claim must be found, either expressly or inherently described, in the single prior art reference. See Celeritas Techs. Ltd. v. Rockwell Int'l Corp., 47 USPQ2d 1516,1522 (Fed. Cir. 1998); see also MPEP § 2131. <u>Park</u> at least fails to disclose or suggest a moveable headrest mounted on or with respect to a support for supporting a user, for moving with rotational movements with respect to the support and supporting a head of the user, as recited in claim 1.

<u>Park</u> provides an immersive cyberspace system that includes a relaxation chair adapted to receive a human subject, a motion base, a neutral immersion display hood attached to the relaxation chair, and one or more neutral hand posture controllers. See Park column 2, lines 12-17. The Office asserts on pages 2 and 6 of the final Office Action of May 23, 2006 that the motion base 14 corresponds to the "support for supporting a user in viewing images in a standing, seated, or reclining posture" recited in claim 1. See Park Figure 1A. The Office further asserts on pages 2 and 6 that the hood 16, headrest 24, and relaxation chair 12 of Park corresponds to the moveable headrest recited in claim 1. See Park Figures 1A & 2. However, contrary to the assertions of the Office, applicant respectfully submits that the motion base 14 does not correspond to the support recited in claim 1, because the motion base 14 is not for supporting a user viewing images in a standing, seated, or reclining posture. Instead, the motion base 14 discussed in Park is for supporting the relaxation chair 12, and does not support the subject or user. See Park column 2, lines 41-42 (motion base supports the relaxation chair); see also column 5, lines 14-15; column 9, lines 41-42. In Park, it is the relaxation chair 12 that supports the subject, so that the subject is in a neutral body position. See Park column 2, lines 27-28; column 5, lines 60-63. One of ordinary skill in the art would understand that the motion base 14 discussed in Park cannot support the subject, and therefore does not correspond to the support for supporting the user as recited in claim 1.

The Office has interpreted a "support for supporting a user" too broadly, and has failed to give "supporting" the ordinary and customary meaning as understood by one of ordinary skill in

the art. See MPEP § 2111.01. During patent prosecution an examiner must give claims their broadest reasonable interpretation consistent with the specification. See MPEP § 2111. However, the examiner is limited in how broad an interpretation can be given to a claim. The interpretation of a claim must be "reasonable." In re Morris, 44 USPQ2d 1023, 1028-29 (Fed. Cir. 1997) (question is whether the PTO's interpretation of the disputed claim language is "reasonable"). In addition, the interpretation must be "consistent with the specification." In re Cortright, 49 USPQ2d 1464, 1467 (Fed. Cir. 1999). The interpretation given to the term "supporting" ignores interpretive guidance provided by the specification, and is inconsistent with how the term is used in Park to refer to identical terms. See In re Cortright, 49 USPQ2d at 1467 (the PTO's interpretation of a claim term is inconsistent if it is so broad that is conflicts with the meaning given to identical terms in other patents from analogous arts). The ordinary and customary meaning of the term "supporting" is providing direct support by itself to an object in question. For example, Park states that "the relaxation chair supports a subject positioned thereupon." See Park column 2, lines 27-28. In turn, Park then states that the motion base supports the relaxation chair. See Park column 2, lines 42-43. Therefore, the one of ordinary skill in the art would understand that the relaxation chair directly supports the subject by itself, and the motion base is configured to directly support the relaxation chair. However, one of ordinary skill in the art would also understand that the motion base 14 by itself is unsuitable for supporting the subject. As can been seen from Figures 1B and 1C the motion base 14 is not configured or adapted to provide any support to the user, instead the motion base 14 only supports the relaxation chair 12. As such, the interpretation given to claim 1 by the Office is overly broad and inconsistent with the ordinary and customary meaning of the terms recited in claim 1.

Therefore, one of ordinary skill in the art would understand that the support for supporting the user recited in claim 1 does not correspond to the motion base 14 of <u>Park</u>, because the motion base 14 cannot support the subject, i.e. user, by itself. As such, at most the relaxation chair 12 may correspond to the support recited in claim 1, and the headrest 24 is not <u>movable</u> relative to the relaxation chair 12, because the display hood 16 is attached to the relaxation chair 12. See <u>Park</u> column 6, lines 13-15. In fact, the Office acknowledges on pages 2 and 6 of the final Office Action that the headrest 24 is "rigidly" attached to the relaxation base 12. Therefore,

<u>Park</u> at least fails to disclose or suggest a movable headrest for moving with rotational movements <u>with respect to the support</u>, as recited in claim 1.

Claims 3 and 4

Claims 3 and 4 ultimately depend from independent claim 1, and therefore are not disclosed or suggested by <u>Park</u> at least in view of their dependencies.

Furthermore, claims 3 and 4 recite an actuator for moving said moveable headrest. As discussed above, <u>Park</u> fails to disclose or suggest a moveable headrest, but instead only discloses at most a fixed headrest. Therefore, <u>Park</u> cannot disclose or suggest an actuator for moving the headrest, because the headrest in <u>Park</u> is fixed. The Office acknowledges on pages 2 an 6 of the final Office Action that the headrest 24 is rigidly attached to the relaxation base 12. The actuators 15 disclosed by <u>Park</u> only act to move the relaxation chair 12, and are in no way configured to move the headrest 24 with respect to the relaxation chair 12. The headrest 24 is part of the display hood 16, and since the display hood 16 is attached to the relaxation chair 12, the headrest 24 is also fixed relative to the relaxation chair 12. <u>See Park</u> column 6, lines 13-15. Therefore, for at least this additional reason, claims 3 and 4 are also not disclosed or suggested by <u>Park</u>.

Claim 7

Claim 7 ultimately depends from independent claim 1, and therefore is not disclosed or suggested by <u>Park</u> at least in view of its dependency.

In addition, claim 7 recites that the support is moveable by an actuator. Applicant respectfully submits, that if claim 1 is interpreted in the manner asserted by the Office then claim 7 is not disclosed or suggested by <u>Park</u>, because <u>Park</u> does not disclose that the motion base 14 is movable by actuator 15. Instead, it is apparent that the motion base 14 remains stationary at all times, and only the relaxation chair 12 is moved by the actuator 15. Therefore, even if the motion base 14 is interpreted to correspond to the support recited in claim 1, which applicant does not admit, then claim 7 is not disclosed or suggested by <u>Park</u>, because <u>Park</u> does not disclose or suggest an actuator for moving the motion base 14.

Claim 2

Claim 2 ultimately depends from independent claim 1, and therefore is not disclosed or suggested by <u>Park</u> at least in view of its dependency.

Claims 5 and 6

Claims 5 and 6 ultimately depend from independent claim 1, and therefore are not disclosed or suggested by <u>Park</u> at least in view of their dependencies.

Claims 11 and 12

Claims 11 and 12 ultimately depend from independent claim 10, and therefore are not disclosed or suggested by <u>Park</u> at least in view of their dependencies.

Claim 8

Claim 8 contains limitations similar to those recited in claim 1, and therefore for at least the reasons discussed above in relation to claim 1 is not disclosed or suggested by Park.

Furthermore, claim 8 recites a sensor coupled to a moveable headrest responsive to head movements of the user with respect to a support for providing a sensed signal having a magnitude indicative of differing directions-of-view corresponding to the head movements. Park does not disclose or suggest the sensor as recited in claim 8. Instead, the display hood 16, which may include a headrest 24, is rigidly attached to the relaxation chair 12. Therefore, the system discussed in Park is incapable of sensing head movements of the user. The Office asserts that a sensor as recited in claim 8 is inherent in the teachings of Park. However, claim 8 specifically recites "responsive to head movements of the user." Therefore, the sensor must be able to sense "head movements" and not just "rotational movements" as asserted by the Office on page 3 of the final Office Action. As such, Park cannot inherently teach or suggest the sensor as recited in claim 8 because it is not necessarily present in the system disclosed by Park. See MPEP § 2112. For at least this additional reason, claim 8 is not disclosed or suggested by Park.

Claim 9

Claim 9 contains limitations similar to those recited in claim 1, and therefore for at least the reasons discussed above in relation to claim 1 is not disclosed or suggested by <u>Park</u>.

Claim 10

Claim 10 contains limitations similar to those recited in claim 1, and therefore for at least the reasons discussed above in relation to claim 1 is not disclosed or suggested by Park.

Claim 13

Claim 13 ultimately depends from claim 10, and is patentable over the cited reference at least in view of its dependency.

Claim Rejections Under § 103

Claims 16-19

Claims 16-19 ultimately depend from an independent claim, and are patentable over the cited references at least in view of their dependencies.

Furthermore, claims 16-19 are patentable over <u>Park</u> in view of <u>Helman</u>, because there is no motivation to combine the teachings of Helman with those of <u>Park</u>. In order to establish obviousness, there must be some motivation or suggestion to combine the cited references, and the cited references when combined must teach all of the claim limitations. *See* MPEP § 2142. First, the Office asserts on page 5 of the final Office Action that it would have been obvious to provide left and right rotation in the <u>Park</u> system in order to support a user's head. However, <u>Park</u> already provides for a headrest 24 that is designed to support the subject's head. Therefore, the motivation offered by the Office to combine the references is insufficient because it is irrelevant.

Second, the Office has engaged in impermissible hindsight reasoning by using applicant's own disclosure to provide the motivation to combine the references. Using the invention as a roadmap in order to find its components in the prior art is impermissible hindsight reasoning. *Ruiz v. A.B. Chance Co.*, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004); *see also In re Gorman*, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (it is impermissible simply to engage in hindsight reconstruction of the claimed invention using the applicant's structure as a template and selecting elements from references to fill the gaps). Applicant referred to Helman (U.S. Patent No. 5,791,735) on page 6 of the specification to describe a headrest embodiment of the present invention. The Office has merely combined the teachings of Park and Helman using the

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applicant's own disclosure, because there is no motivation to combine the system disclosed in Park with the teachings of Helman. When an invention is contended to be obvious based on a combination of elements across different references, there must be a suggestion, motivation or teaching to those skilled in the art for such a combination. *Barbell Co. v. USA Sports Inc.*, 73 USPQ2d 1225, 1227 (Fed. Cir. 2004). Therefore, the Office has failed to show proper motivation to combine the cited references, and as such has failed to establish a prima facie case of obviousness.

Conclusion

For the reasons discussed above, applicant respectfully submits that the rejections of the final Office Action have been shown to be inapplicable, and respectfully requests that the Board reverses the rejections to pending claims 1-19. The Commissioner is hereby authorized to charge deposit account 23-0442 for any fee deficiency required to submit this Amended Appeal Brief.

Respectfully submitted:

Zith R Cest

Date: 6 February 2007

Keith R. Obert

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CLAIMS APPENDIX

1. Apparatus, comprising:

a support for supporting a user in viewing images in a standing, seated, or reclining posture; and

a moveable headrest mounted on or with respect to said support, for moving with rotational movements with respect to said support and supporting a head of said user in executing said rotational movements while viewing said images from a changing direction.

- 2. The apparatus of claim 1, further comprising a display for providing said images for said viewing from said changing direction.
- 3. The apparatus of claim 1, further comprising an actuator for moving said moveable headrest.
- 4. The apparatus of claim 2, further comprising an actuator for moving said moveable headrest.
- 5. The apparatus of claim 4, further comprising a sensor for sensing movements of said moveable headrest.
- 6. The apparatus of claim 1, further comprising a sensor for sensing said movements from a changing direction.

7. The apparatus of claim 1, wherein said support is moveable by an actuator.

8. Apparatus, comprising:

a sensor coupled to a moveable headrest for supporting a user's head with respect to a support, responsive to head movements of the user with respect to said support, for providing a sensed signal having a magnitude indicative of differing directions-of-view corresponding to said head movements;

a reality engine, responsive to said sensed signal, for providing an image signal indicative of a sequence of images from differing directions-of-view selected according to said sensed signal and corresponding thereto; and

a display, responsive to said image signal, for providing said sequence of images for viewing by said user from said differing directions-of-view.

9. Apparatus, comprising:

a reality engine, responsive to a start command signal, for providing an image signal indicative of a sequence of images from differing directions-of-view and for providing an actuator command signal corresponding thereto;

a display, responsive to said image signal, for providing said sequence of images for viewing by said user from said differing directions-of-view; and

an actuator, responsive to said actuator command signal, for moving a headrest with respect to a support with said headrest supporting a user's head with movements with respect to said support corresponding to said differing directions-of-view.

- 10. Apparatus, comprising a headrest and a support for supporting a user viewing images in a reclining posture with a head of said user resting on said headrest mounted on or with respect to said support, said headrest comprising a movable headrest for supporting said head of said user in executing head movements in a changing direction of said head of said user while viewing images provided from a correspondingly changing direction of view, said head and headrest moving together in said changing direction with respect to said support.
- 11. The apparatus of claim 10, further comprising an actuator connected to said movable headrest for moving said movable headrest with respect to said support for changing said direction of said head of said user in executing head movements with respect to said support.
- 12. The apparatus of claim 11, wherein said actuator is responsive to a command signal from a reality engine for said moving said movable headrest.
- 13. The apparatus of claim 12, further comprising a sensor for sensing movements of said movable headrest for providing a sensed signal to said reality engine.
- 14. The apparatus of claim 11, wherein said support is itself positionable.
- 15. The apparatus of claim 1144, wherein said support is continuously positionable.

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- 16. The apparatus of claim 1, wherein said rotational movements include left and right rotational movements.
- 17. The apparatus of claim 10, wherein said changing direction includes left and right changes in direction.
- 18. The apparatus of claim 8, wherein said differing directions-of-view include differing left and right directions-of-view.
- 19. The apparatus of claim 9, wherein said differing directions-of-view include differing left and rights directions-of-view.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.